December 23, 1996

Ms. Mary Cottrell, Secretary Department of Public Utilities 100 Cambridge St. 12th Floor Boston, MA 02202

Re: DPU 96-25, Reply Brief

Dear Ms. Cottrell,

Please accept this letter as the Reply Brief of the Union of Concerned Scientists ("UCS") in this docket. Also enclosed is a disk with the filing in WordPerfect 5.1 format.

The Center for Energy and Economic Development ("CEED") has raised one previously unaddressed issue related to the renewable energy provisions of the Mass. Electric ("MECo") settlement in its Initial Brief of December 16, 1996. CEED states that the settlement "would have ratepayers pay \$1.489 billion (!) in stranded cost for existing QF and other alternative energy contracts." (at 25, emphasis in original).

UCS has not reviewed CEED's calculations (made only in their Brief, not their testimony) to verify whether they are accurate. They are irrelevant to the renewable energy provisions of the settlement. Whatever the above-market costs of existing QFs, they are the result of PURPA rules that required purchases from <u>non-renewable</u> <u>as well as renewable</u> energy projects at projected long-run avoided costs.

PURPA had its flaws and its costs. It also provided benefits which CEED does not attempt to account for. We have yet to see any attack on PURPA which adds up what stranded costs would have been if utilities had built the projects they were proposing instead: Seabrook 2, Pilgrim 2, etc. PURPA created the non-renewable and renewable competitors which created the pre-conditions for competition in wholesale and retail electricity markets today.

And as CEED stated in its national study: "In 1978, the passage of PURPA almost single-handedly created the renewable energy industry." (CEED-2 at 1-7). For example:

•"Overall, wind technology has made impressive using since 1980 when costs were 40 cents."

- •"Overall, wind technology has made impressive gains since 1980 when costs were 40 cents per kilowatt hour and higher." (*id.* at 2-14).
- •Significant cost reductions have occurred for solar thermal technologies, given that 1980 production costs of 60 cents per kilowatt hour reduced to about 12 cents to 20 cents per kilowatt hour by 1990." (*id.* at 2-20)

In any case, and most importantly, the renewables system benefit charge in the proposed

settlement agreement is not related to PURPA. The renewables funds in the settlement are limited and *de minimus*, averaging less than ¾ of one percent of current customer bills during the four years for which amounts are specified (Ex. UCS-1 at 3). Customer group representatives have supported paying this amount, or more, for renewables. The renewables section of settlement was even cited as one reason why the Associated Industries of Massachusetts supported the agreement in its post hoc comments, for example. (October 29 Public Hearing, DPU 96-100 and DPU 96-25, at 3)

As Mr. Nogee testified, achieving the ten-year renewables kWh sales goal advocated by UCS, and included in the settlement, will likely cost only one to two percent of revenues. Even if this estimate were to turn out to be incorrect, the DPU retains full authority and flexibility to adjust the goal downwards to keep future costs at whatever level it thinks is appropriate.

Inclusion of the goal in the settlement, even if non-binding, does provide value to the renewable energy industry. It provides important guidance to the renewables industry, to customers, and to the legislature. It signals an intent to provide support for renewables over a period of time and in production volumes sufficient for new technologies to become commercialized. It establishes a benchmark for success which would allow funding to be phased out automatically over time. It provides the basis for measuring equivalence in net present value of the ramp-up of renewables cost in the settlement to the DPU proposal of a flat one mill per kWh in DPU 96-100. We urge the DPU to approve it.

Sincerely,	
Alan Nogee	
Senior Energy Analyst	

## CERTIFICATE OF SERVICE

I hereby certify that I have, on this date, caused the foregoing document to be served by first class mail to all parties on the service list, except by hand to the Department.

Dated: December 23, 1996

Alan J. Nogee
Senior Energy Analyst
Union of Concerned Scientists